

Ørsted - East Coast Operational Assets

Notice to Mariners

Period of Notice: August 2020

Version: 2



Table of Contents

| 1 | Introduction | | | | | |
|---|--------------|---|----|--|--|--|
| | 1.1 | Subsea Cables | 4 | | | |
| | 1.2 | Wind Farm Positional Data | 4 | | | |
| 2 | Key Co | ontacts | 5 | | | |
| 3 | Notice | to Mariners Summary: | 6 | | | |
| 4 | Race E | Bank – Notice to Mariners | 7 | | | |
| | 4.1 | Lighting and Marking Status | 7 | | | |
| | 4.2 | Other Operations | 7 | | | |
| | 4.2.1 | String 1 cable Replacement | 7 | | | |
| 5 | Wester | rmost Rough – Notice to Mariners | 9 | | | |
| | 5.1 | Lighting and Marking Status | 9 | | | |
| | 5.2 | Other Operations | 9 | | | |
| | 5.2.1 | Full Site Bathymetric Survey Westermost Rough | 9 | | | |
| | 5.2.2 | Lobster pot filming | 10 | | | |
| 6 | Lincs - | - Notice to Mariners | 11 | | | |
| | 6.1 | Lighting and Marking Status | 11 | | | |
| | 6.2 | Other Operations | 11 | | | |
| | 6.2.1 | Structural Inspections Below Water | 11 | | | |
| 7 | Gunfle | eet Sands – Notice to Mariners | 15 | | | |
| | 7.1 | Lighting and Marking Status | 15 | | | |
| | 7.2 | Other Operations | 15 | | | |
| | 7.2.1 | Transition Piece Maintenance | 15 | | | |
| 8 | Hornse | ea One – Notice to Mariners | 16 | | | |
| | 8.1 | Lighting and Marking Status | 16 | | | |
| | 8.2 | Other Operations | 16 | | | |
| | 8.2.1 | Nearshore Export Cable – Potential exposure | 16 | | | |
| | 8.2.2 | Structural Inspections Below Water | 18 | | | |



| 8.2.3 | Un-manned Service Vessel (USV) Survey | 19 |
|-------|---------------------------------------|----|
| 8.2.4 | Array cable remedial work | 20 |



1 Introduction

Ørsted is an offshore wind farm owner and operator with ten operational wind farms in UK waters. Of these ten, the following offshore wind farms are located off the East Coast of England:

- Gunfleet Sands
- Westermost Rough
- Race Bank
- Lincs
- Hornsea One

The purpose of this monthly Notice to Mariners (NtM) is to ensure that mariners are aware of any non-routine operations across the East Coast assets that could pose a risk to other sea users. Safety is paramount to Ørsted and this notice should assist in ensuring that both mariners and the Ørsted operational team can operate safely offshore. This NtM will provide:

- A regular, clear and consistent overview of non-routine operations
- Updates relating to lighting and marking
- Key contact details
- Access to detailed site information and figures
- Clarity on when Safety Zones and recommended safe separation distances are in force or requested



- Information relating to routine maintenance carried out by Crew Transfer Vessels (CTV) or Service Operation Vessels (SOV).
- Any information relating to export cables
- Any information relating to offshore wind farms currently in development, construction or not operated by Ørsted

Subsea Cables

Subsea cables are installed across each offshore wind farm and are marked on the KIS ORCA charts referenced in Section 1.2. Please note the following advice from NP 100 The Mariners Handbook "Every care should be taken to avoid anchoring, trawling, fishing, dredging, drilling, or carrying out any other activity in the vicinity of cables which might damage them." This warning is repeated on all admiralty charts.

Wind Farm Positional Data





<u>orca.eu/downloads#.XWUTQUxFwjZ.</u> Should mariners require further information or any data in a format that can be used in a plotter or other device, please contact the Company Fisheries Liaison Officer, listed in Section 2 below.

2 Key Contacts

For further information on any of the activities listed within this notice, please use the contact details listed below.

| Site | Ørsted Mailbox/ Offshore Coordination | Fisheries Industry Representative |
|----------------------|--|--|
| Race Bank | Phone: 07826 943808 Email: rowoffshorec@orsted.co.uk | Ady Woods Phone: 07468 898948 Email: firwoods@hotmail.com |
| Westermost Rough | Phone: 07867 674941 Email: wmroffshorec@orsted.co.uk | Guy Pasco Phone: 07880 362082 Email: guy@seascopefisheries.co.uk |
| Lincs Gunfleet Sands | Phone: 07766443319 Email: lincsoffshorec@orsted.co.uk | Ady Woods Phone: 07468 898948 Email: firwoods@hotmail.com Merlin Jackson Phone: 07989 520484 Email: merlinjackson@btinternet.com |
| Hornsea One | Phone: 07775005465 Email: HOWoffshoreC@orsted.co.uk | Nick Garside Phone: 07538 827013 Email: nick.garside@live.co.uk |

Company Fisheries Liaison Officer

The Ørsted Company Fisheries Liaison Officer can be contacted using the details below:

Courtney French

Email: CONFR@Orsted.co.uk



3 **Notice to Mariners Summary:**

| Site | Lighting and Marking Status | Survey | Jack-Up Vessel | Other Works |
|---------------------|--|-----------------------|-------------------|--|
| Race Bank | ОК | None | None | String 1 replacement, |
| Westermost Rough | ОК | Bathymetric Survey | Pacific Orca** | Full site bathymetric survey, Lobster pot filming. |
| Lincs | OK | None | None | Structural inspection below water |
| Gunfleet Sands | A01, A06, E01 + G01 Navigation lights not fully operational | Bathymetric survey, | Wind Pioneer** | External Painting Campaign° ** |
| Hornsea One | OK | None | None | Nearshore export cable Structural inspection below water, USV survey, Array cable remedial* |

^{*} Formal 500m safety zone in place

° Licensable activity

** 500m safety distance requested

*** 200m safety distance requested



4 Race Bank – Notice to Mariners

4.1 Lighting and Marking Status

The lighting and/ or navigational warning systems are currently operational. On the 25th August when the String 1 cable replacement campaign commences (section 4.2.1) turbines D01 & E01 will not be operational. (Identified on Figure 1 below)

4.2 Other Operations

4.2.1 String 1 cable Replacement

The Global Symphony will be completing String 1 cable (see

Figure 1 & Figure 2) replacement on Racebank on or around the 18th August for approximately 28 days.

Mariners are requested to remain a safe distance of 500m from Global Symphony when it is observed undertaking String 1 replacement.

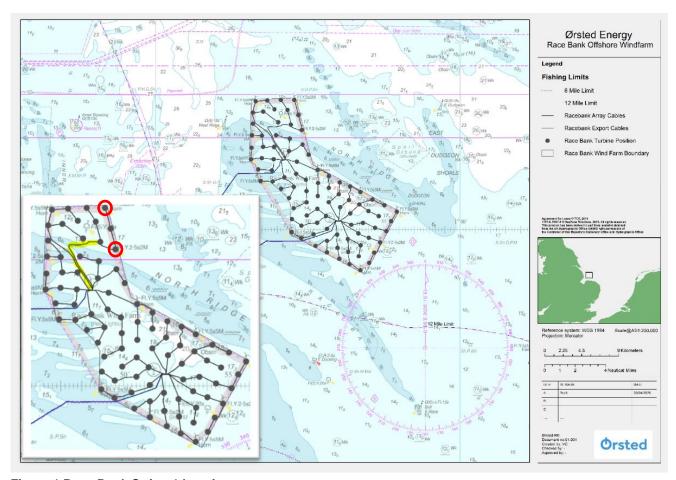


Figure 1 Race Bank String 1 location



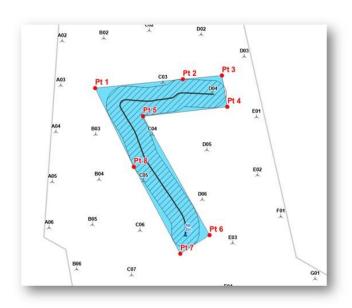


Figure 2 Race Bank String 1 replacement

Table 1 Coordinates of String 1

| Point ID | WGS84 (Decimal Degrees) | | WGS84 (Degrees, Minutes, Seconds) | | ETRS89 UTM31N (Metres) | |
|----------|-------------------------|-------------|-----------------------------------|-------------------------|---------------------------|----------|
| | Latitude | Longitude | Latitude | Longitude | Easting | Northing |
| 1 | 53.31915514 | 0.782630381 | 53° 19' 08.95324846" N | 000° 46' 57.46033658" E | 352301 | 5910067 |
| 2 | 53.32105874 | 0.806520098 | 53° 19' 15.80621138" N | 000° 48' 23.46331521" E | 353899 | 5910229 |
| 3 | 53.32186137 | 0.817143875 | 53° 19' 18.69567434" N | 000° 49' 01.70890916" E | 354609 | 5910297 |
| 4 | 53.31676264 | 0.818859541 | 53° 19' 00.34024726" N | 000° 49' 07.88530871" E | 354706 | 5909726 |
| 5 | 53.31479499 | 0.795956169 | 53° 18' 53.25670756" N | 000° 47' 45.43317179" E | 353174 | 5909554 |
| 6 | 53.29567808 | 0.815100403 | 53° 17' 44.43583086" N | 000° 48' 54.35241144" E | 354384 | 5907389 |
| 7 | 53.29248035 | 0.807259602 | 53° 17' 32.92402145" N | 000° 48' 26.12552908" E | 353850 | 5907049 |
| 8 | 53.30645990 | 0.793853268 | 53° 18' 23.25038719" N | 000° 47' 37.86272707" E | 353005 | 5908632 |



Table 2 Vessel Details

| Table 2 Vessel Details | | | | |
|---|-----------------------------------|----------------|--|--|
| | General Information | Vessel Picture | | |
| Name | Global Symphony | | | |
| Flag | Norway | | | |
| Year Built | 2011 | | | |
| IMO Number | 232025210 | A Link | | |
| Call Sign MGJH7 | | | | |
| | Vessel Contact Details | | | |
| Bridge +4723671810 / +4477324980 | | | | |
| Party Chief | Ross Macdonald | | | |
| | | | | |
| Email | Ross.macdonald@globalmarine.group | James . | | |

5 Westermost Rough – Notice to Mariners

5.1 Lighting and Marking Status

The lighting and/ or navigational warning systems are currently operational. No planned outages.

5.2 Other Operations

5.2.1 Full Site Bathymetric Survey Westermost Rough

Vessel, the Deep Seapal will be undertaking a full site bathymetric survey of Westermost Rough Windfarm, this will be carried out using a hull mounted multibeam echosounder. This work is due to start on or around the 25th August and the duration will be approximately 14 days. The vessel will have a fishing liaison officer on board for some of the works.



| | General Information | Vessel Picture | |
|------------------------|--------------------------------|--------------------|--|
| Name | Deep Seapal | | |
| Flag | United Kingdom | 114 | |
| Year Built | 2014 | | |
| MMSI Number 235089472 | | Manual Canada | |
| Call Sign | 2 <i>EZ</i> U7 | | |
| Vessel Contact Details | | | |
| Bridge | +31(0)6 1322 1213 | | |
| Party Chief | Marian Cosma / Fabian van Wijk | DEEP SEAPAL SURVEY | |
| | | | |
| Email | deepseapal@deepbv.nl | | |

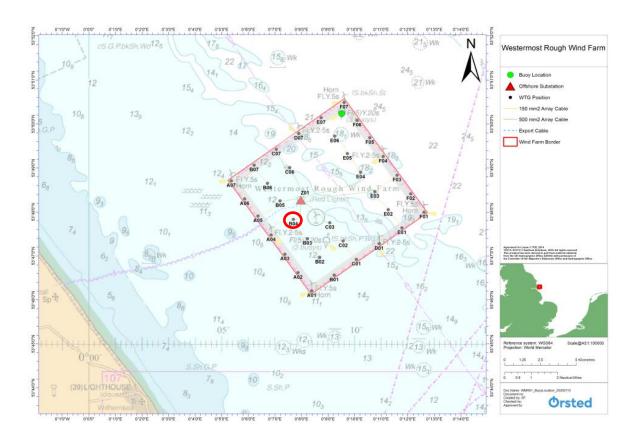
5.2.2 Lobster pot filming

Vessel, Huntress will be deploying a lobster pot with a camera attached at Wind \Turbine location B04 as identified in figure 1 below. It is planned to be deployed around the 10th August and will then be recovered later in August.

| | General Information | Vessel Picture |
|-----------------------------|--------------------------|----------------|
| Name | The R/V Huntress | |
| Flag | UK | 4 |
| Year Built | 2011 | |
| IMO Number None | | A. |
| Call Sign | 2ETP3 | |
| | Vessel Contact Details | |
| Bridge 07902 812167 | | |
| Party Chief Jamie Robertson | | |
| Email | j.robertson@hfig.org.uk; | |



Figure 3 Westermost Rough



6 Lincs – Notice to Mariners

6.1 Lighting and Marking Status

The lighting and/ or navigational warning systems are currently operational. No planned outages.

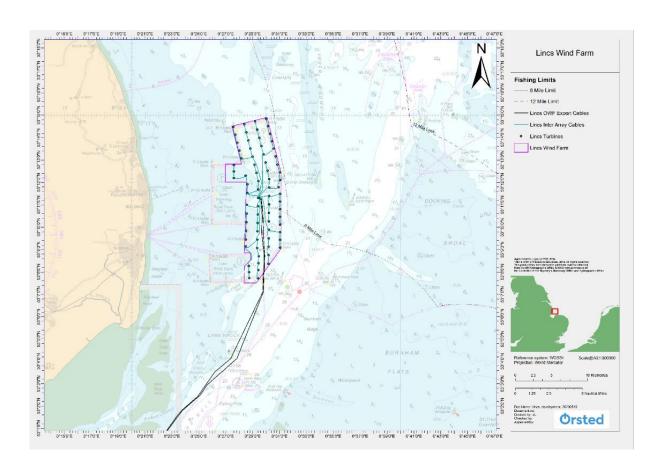
6.2 Other Operations

6.2.1Structural Inspections Below Water

Structural inspections will be taking place on LINCS windfarm with HBC Achiever on or around the 18th July for approximately 13 days.

Mariners are requested to remain a distance of 500m from HBC Achiever when it is observed undertaking diving work in LINCS OWF at locations LS17, LS03, LS70, LS72, LS09, LS08, LS23, LS39, LS40, LS41, LS42, LS60, LS61, LS63, LS66, LS68, LS31, LS73, during this period divers and/or an ROV will be in the water around the vessel. The proposed end date of this work is 1st August.







Lincs Coordinates

| TURB | NES | 1 | TURB | NES | TURE | INES |
|------|-------------------------|---|------|-------------------------|------|-------------------------|
| LS01 | 53°14.475'N 00°27.569'E | ı | LS26 | 53*10.192'N 00*29.377'E | LS51 | 53°08.365'N 00°30.183'E |
| LS02 | 53*14.124'N 00*27.717'E | ı | LS27 | 53*09.819'N 00*29.364'E | LS52 | 53*14.843'N 00*30.010'E |
| LS03 | 53°13.772'N 00°27.866'E | ı | LS28 | 53*09.445'N 00*29.352'E | LS53 | 53*14.511'N 00*30.149'E |
| LS04 | 53°13,421'N 00°28,014'E | ī | LS29 | 53*09.067'N 00*29.340'E | LS54 | 53*14.170'N 00*30.293'E |
| LS05 | 53"13.069'N 00"28.162'E | ı | LS30 | 53*08.698'N 00*29.459'E | LS55 | 53*13.837'N 00*30.433'E |
| LS05 | 53*12.299'N 00*28.487'E | ī | LS31 | 53*08.390'N 00*29.442'E | LS56 | 53*13.513'N 00*30.570'E |
| LS07 | 53*11.917'N 00*28.624'E | ī | LS32 | 53*08.082'N 00*29.433'E | LS57 | 53*13.160'N 00*30.718'E |
| LS08 | 53*11.532'N 00*28.604'E | ı | LS33 | 53*07.712'N 00*29.403'E | LS58 | 53*12.791'N 00*30.856'E |
| LS09 | 53°10.992'N 00°28.576'E | ī | LS34 | 53*14.720'N 00*29.199'E | LS59 | 53*12.451'N 00*31.016'E |
| LS10 | 53°10.607'N 00°28.556'E | 1 | LS35 | 53*14.354'N 00*29.351'E | LS60 | 53*12.104'N 00*31.048'E |
| LS11 | 53*10.222'N 00*28.538'E | ī | LS36 | 53*13.987'N 00*29.505'E | LS61 | 53*11.790'N 00*30.935'E |
| LS12 | 53*09.836'N 00*28.520'E | ī | LS37 | 53*13.621'N 00*29.659'E | LS62 | 53*11.488'N 00*31.047'E |
| LS13 | 53°09.451'N 00°28.503'E | Ī | LS38 | 53*13.254'N 00*29.814'E | L963 | 53*11.146'N 00*31.047'E |
| LS14 | 53°09.142'N 00°28.489'E | ī | LS39 | 53*12.888'N 00*29.968'E | LS64 | 53*10.803'N 00*31.047'E |
| LS15 | 53*14.598'N 00*28.382'E | ī | LS40 | 53*12.521'N 00*30.122'E | LS65 | 53*10.460'N 00*31.048'E |
| LS16 | 53*14.235'N 00*28.535'E | 1 | LS41 | 53*12.150'N 00*30.237'E | LS66 | 53*10.117'N 00*31.047'E |
| LS17 | 53*13,873'N 00*28,688'E | ī | LS42 | 53*11.772'N 00*30.238'E | LS67 | 53*09.774'N 00*31.047'E |
| LS18 | 53°13.511'N 00°28.840'E | ī | LS43 | 53*11.395'N 00*30.232'E | LS68 | 53°09.432'N 00°31.047'E |
| LS19 | 53°13.149'N 00°28.993'E | ı | LS44 | 53*11.016'N 00*30.226'E | LS69 | 53°09.088'N 00°31.048'E |
| LS20 | 53*12.786'N 00*29.145'E | 1 | LS45 | 53*10.639'N 00*30.220'E | LS70 | 53*12.778'N 00*27.611'E |
| LS21 | 53°12.425'N 00°29.297'E | 1 | LS45 | 53*10.260'N 00*30.214'E | LS71 | 53*12.488'N 00*27.610'E |
| LS22 | 53*12.060'N 00*29.436'E | 1 | LS47 | 53*09.882'N 00*30.207'E | LS72 | 53*12.198'N 00*27.611'E |
| LS23 | 53*11.687'N 00*29.424'E | 1 | LS48 | 53*09.505'N 00*30.201'E | LS73 | 53°08.266'N 00°28.721'E |
| LS24 | 53*10.940'N 00*29.400'E | ı | LS49 | 53*09.127'N 00*30.195'E | LS74 | 53°07.993'N 00°28.738'E |
| LS25 | 53*10.566'N 00*29.388'E | ı | LS50 | 53*08.749'N 00*30.190'E | LS75 | 53*07.726'N 00*28.754'E |



| | General Information | Vessel Picture | | |
|------------------------|-----------------------------------|--|--|--|
| Name | HBC Achiever | | | |
| Flag | DENMARK | | | |
| Year Built | 2014 | | | |
| IMO/MMSI | 9647978 / 219305000 | | | |
| Call Sign | оwмн2 | | | |
| Vessel Contact Details | | 100 | | |
| Bridge | +45 28 56 47 99 / +45 28 56 47 99 | HE ALMITT | | |
| Party Chief | Rafal Nierzwicki | The state of the s | | |
| | | | | |
| Email | achieverbridge@hbc-tec.dk | -Vice # | | |



7 Gunfleet Sands – Notice to Mariners

7.1 Lighting and Marking Status

The lighting and/ or navigational warning systems are currently operational. No planned outages.

7.2 Other Operations

7.2.1 Transition Piece Maintenance.

Transition Piece maintenance will be undertaken on all WTG's on GFS01 + GFS02 from the 11th May for a provisional 4 months. Sequence of locations and dates are unavailable as works will be weather dependant and coordinated to ensure no conflict with routine maintenance operations.

We request Mariners observe a safe distance from the affected turbine(s) while works are being carried out.

The CTV's "Discovery and Endeavour" will act as Guard Vessels during the maintenance programme with the vessel broadcasting the Turbine ID, establishment/cancellation of the safety zones and seeking contact with marine traffic approaching or nearing the areas on VHF Channel 16 and 12.



| | General Information | Vessel Picture |
|---------------------------|-------------------------------------|---------------------------------------|
| Name | Discovery | |
| Flag | British | |
| Year Built | 2012 | 5.4 |
| MMSI Number 235096731 | | |
| Call Sign | 2GEQ9 | |
| Ve | essel Contact Details | |
| Bridge 07791180629 | | THE DISCOURT North See Empiries SECUL |
| Party Chief | A Brown + L Devaney | |
| Email | nsdiscovery@northsealogistics.co.uk | |

| | General Information | Vessel Picture |
|----------------|-----------------------------------|---------------------|
| Name | Pura vida | |
| Flag | British | |
| Year | 2009 | |
| MMSI | 235087893 | |
| Call Sign | 2ESX5 | |
| | Vessel Contact Details | RESCUE |
| Bridge | 07791180629 | North Sea Logistics |
| Party Chief | R King + J Prytherch | |
| Email | puravida @northsealogistics.co.uk | |

8 Hornsea One – Notice to Mariners

8.1 Lighting and Marking Status

The lighting and/ or navigational warning systems are currently operational. No planned outages.

8.2 Other Operations

8.2.1 Nearshore Export Cable – Potential exposure.

A potential nearshore Export Cable exposure has been identified (as shown in Figure 4)

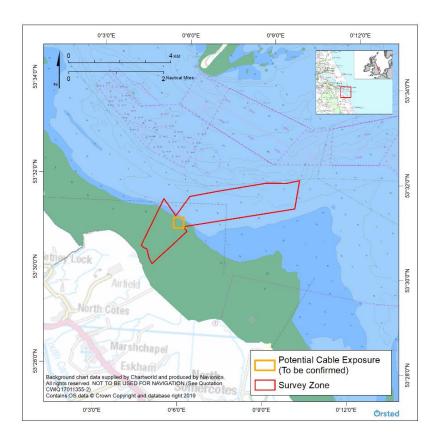
Mariners are advised that Hornsea Project are reviewing the geophysical survey data from along the nearshore part of offshore export cable corridor.

Work is planned to re-bury the exposed cable via CFE between the 1st September and 10th September 2020 by Coastal Challenger. This will be done over 2 passes between these dates.





Figure 4 Location of nearshore exposed cable at Hornsea One





The Coordinates of the work site are as follows:

| 0° 4,832' E | 53° 30,258' N |
|-------------|---------------|
| 0° 4,779' E | 53° 30,361' N |
| 0° 4,752' E | 53° 30,421' N |
| 0° 4,735' E | 53° 30,452' N |
| 0° 4,731' E | 53° 30,455' N |
| 0° 4,727' E | 53° 30,459' N |
| 0° 4,725' E | 53° 30,460' N |
| 0° 4,705' E | 53° 30,464' N |
| 0° 4,694' E | 53° 30,467' N |
| 0° 4,639' E | 53° 30,478' N |
| 0° 4,560' E | 53° 30,509' N |
| 0° 4,524' E | 53° 30,531' N |

| 0° 5,263' E | 53° 31,533' N |
|-------------|---------------|
| 0° 5,401' E | 53° 31,425' N |
| 0° 5,709' E | 53° 31,184' N |
| 0° 5,735' E | 53° 31,207' N |
| 0° 6,181' E | 53° 31,601' N |
| 0° 7,206' E | 53° 31,738' N |
| 0° 8,855' E | 53° 31,942' N |
| 0° 9,278' E | 53° 31,952' N |
| 0° 9,559' E | 53° 31,954' N |
| 0° 9,646' E | 53° 31,967' N |
| 0° 9,751' E | 53° 31,983' N |
| 0° 9,861' E | 53° 31,999' N |

| 0° 9,945' E | 53° 32,011' N |
|--------------|---------------|
| 0° 10,041' E | 53° 32,024' N |
| 0° 9,915' E | 53° 31,427' N |
| 0° 6,046' E | 53° 30,963' N |
| 0° 5,998' E | 53° 30,957' N |
| 0° 6,120' E | 53° 30,862' N |
| 0° 5,580' E | 53° 30,538' N |
| 0° 5,130' E | 53° 30,268' N |
| 0° 4,933' E | 53° 30,150' N |
| 0° 4,883' E | 53° 30,197' N |
| 0° 4,851' E | 53° 30,231' N |
| 0° 4,832' E | 53° 30,258' N |

8.2.2 Structural Inspections Below Water

Structural inspections will be taking place on Hornsea 1 windfarm on or around the 14th August for approximately 2 days.

Mariners are requested to remain a distance of 500m from HBC Achiever when it is observed undertaking diving work in HOW01, during this period divers will be in the water around the vessel. The proposed end date of this work is 15th August

| | General Information | Vessel Picture |
|-------------|-----------------------------------|----------------|
| Name | HBC Achiever | |
| Flag | DENMARK | • |
| Year Built | 2014 | |
| IMO/MMSI | 9647978 / 219305000 | |
| Call Sign | OWMH2 | |
| | Vessel Contact Details | 200 |
| Bridge | +45 28 56 47 99 / +45 28 56 47 99 | His American |
| Party Chief | Rafal Nierzwicki | |
| | | |
| Email | achieverbridge@hbc-tec.dk | The A |

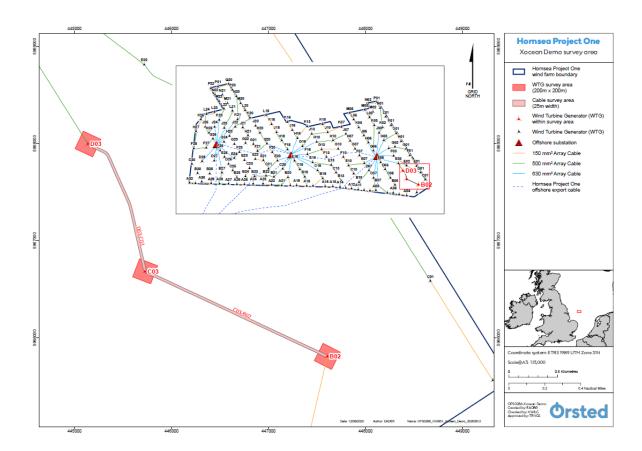


8.2.3 Un-manned Service Vessel (USV) Survey

A survey of a USV will take place at HOW01 from the 1st – 4th September. It is operational 24hrs a day. The USV is 4.5m long, and driven remotely by a USV pilot. It will be mobilized with GPS, MultiBeam EchoSounder (MBES) and Parametric EchoSounder (PES) for survey, as well as AIS, thermal imaging and light cameras, active radar reflector, and lights, for navigation.

The survey will contain the following:

- 1. Box in at WTG D03 and C03, and B02 (MBES to capture scour protection and surrounding seabed), 125m radius
- 2. MBES survey, and PES verification cross lines at: D03 C03
- 3. MBES survey, and PES verification cross line at: C03 B02





| | General Information | Vessel Picture |
|-------------|---------------------------------|------------------------|
| Name | x 09 | |
| Flag | UK | |
| Year Built | 2020 | - 44, |
| IMO/MMSI | 232027632 | |
| Call Sign | MHIJ8 | |
| | Vessel Contact Details | " SIIDVEY |
| Bridge | Mike Lewis: +353 87 796 4958 | Holocope Park Britania |
| Party Chief | Tom Davenport: +44 7759 237 524 | |
| | | |
| Email | operations@xocean.com | |

8.2.4 Array cable remedial work

Remedial work will take place on HOW01 String 7 between locations Z13-F03 & F03-E02 shown on figure 1 below. Work is due to commence on 27th August 2020 until the end of September 2020.

Mariners must observe an approved safety zone of 500m whenever The Livingstone is next to an OSS or WTG. A minimum separation distance of 500m is also requested when the vessel is observed manoeuvring into position.

| | General Information | Vessel Picture |
|---------------------|---|--|
| Name | Living Stone | |
| Flag | Netherlands | 7 |
| Year Built | 2017 | - 19-1 |
| IMO/MMSI Number | IMO 9776925 MMSI 244010952 | All and a second second |
| Call Sign | PBXN | The state of the s |
| | Vessel Contact Details | |
| Bridge (Captain) | +49 42151 7219 1983 | LIVING STORY |
| Party Chief OIM | +49 421 517 219 1982 | |
| Email | Bridge Livingstone@ships.deme- group.com | |





Figure 1

